



REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending application. The final Office Action dated June 16, 2006 and the Advisory Action dated October 2, 2006, has been received and its contents carefully reviewed.

The Applicants also wish to thank the Examiner for the courtesies extended to the Applicants' representatives during the personal interview conducted on November 15, 2006. During the interview the Applicants and the Examiner discussed the rejections to the claims and the Examiner's interpretation of the references, but no agreement was reached.

Claims 1-30 are rejected by the Examiner. With this response, claims 1, 10-13, 19, and 24-26 have been amended. No new matter has been added. Claims 1-30 remain pending in this application.

In the Office Action, claims 1, 3 and 8 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,946,066 to Lee et al. (hereinafter "Lee"). Claims 2, 4-7 and 9-30 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of U.S. Patent No. 5,745,207 to Asada et al. (hereinafter "Asada").

The rejection of claims 1, 3, and 8 under 35 U.S.C. § 102(e) as being anticipated by Lee is respectfully traversed and reconsideration is requested. Applicants submit that Lee does not anticipate claims 1, 3, and 8 because Lee does not disclose either explicitly or inherently, each and every element of the claims.

Claims 1, 3, and 8 each recites a liquid crystal display device having a combination of features including "a plurality of gate lines on a first surface of a substrate" and "wherein the common line is formed on a different layer in a cross sectional view taken perpendicular to the surface of the substrate from the gate line." The Examiner in the Office Action cites Lee as disclosing the quoted feature referring in particular to FIG. 3A and column 2, line 60-65 of Lee. Applicants respectfully disagree that Lee discloses the quoted feature.

Lee, at column 2, lines 44-45 states, "...numeral 13 is a counter electrode formed on the same plane as the gate electrode." While Lee does not include a "cross sectional view taken perpendicular to the surface of the substrate" as recited in claim 1, 3, and 8, Applicants submit that the quoted statement of Lee is contrary to "wherein the common line is formed on a different

layer in a cross sectional view taken perpendicular to the surface of the substrate from the gate line” and that there is no disclosure inherently or explicitly in Lee showing “wherein the common line is formed on a different layer in a cross sectional view taken perpendicular to the surface of the substrate.”

Applicants further submit that Lee is does not show or disclose that the common line and the gate line overlap or cross each other or provide any other disclosure implying that “wherein the common line is formed on a different layer in a cross sectional view taken perpendicular to the surface of the substrate.” Accordingly, Applicants submit that Lee does not disclose, either inherently or explicitly at least “wherein the common line is formed on a different layer in a cross sectional view taken perpendicular to the surface of the substrate from the gate line” and that claims 1, 3, and 8 are not anticipated by Lee.

The rejection of claims 2, 4-7, and 9-30 under 35 U.S.C. § 103(a) as being unpatentable over Lee in view of Asada is respectfully traversed and reconsideration is requested.

With respect to claims 2, 4-7, and 9, Applicants note that claims 2, 4-7, and 9 each depends from claim 1 and each includes by reference all of the elements of claim 1.

As Applicants have discussed above claim 1 is not anticipated by Lee. In rejecting claims 2, 4-7, and 9, the Examiner cites Asada to cure the deficiencies in the teachings of Lee. Applicants submit that Asada does not cure the deficiencies in Lee related to “wherein the common line is formed on a different layer in a cross sectional view taken perpendicular to the surface of the substrate from the gate line,” as recited in claim 1. Applicants submit that Lee and Asada, analyzed singly or in combination do not teach all of the elements of claim 1. Accordingly, Applicants submit that claim 1, and claims 2, 4-7, and 9 depending therefrom are allowable over Lee and Asada.

Claim 10 recites a liquid crystal display device having a combination of features including “at least one light shielding layer on the pixel region, the light shielding layer crossing the data lines, the data electrode, and the common electrode at respective ones of the data line bent portions, the data electrode bent portions and the common electrode bent portions, wherein the at least one light shielding layer is formed on a different layer in a cross sectional view taken perpendicular to the surface of the substrate from the gate lines.” In the Office Action the Examiner cites Lee as teaching “the light shielding layer crossing the data lines, the data

electrode, and the common electrode at respective ones of the data line bent portions, the data electrode bent portions, and the common electrode bent portions” referring in particular to FIG. 3B and column 3, lines 8-15 of Lee. Applicants submit that Lee, including the portions cited by the Examiner, does not describe a light shielding layer arranged as recited in claims 10. For example, the light shielding layer does not cross the “data electrode ... at respective ones of the ... the data electrode bent portions” as recited in claim 10.

The Examiner cites Asada as allegedly curing deficiencies in Lee. In particular, the Examiner cites Asada as teaching “the common line crossing the data electrode at the data electrode bent portion and the common electrode at the common electrode bent portion.” However, the common line of Asada is not disclosed or suggest to be “formed on a different layer in a cross sectional view taken perpendicular to the surface of the substrate from the gate lines,” as recited by claim 10 in either Lee or Asada. Accordingly, Applicants submit that Asada does not cure the deficiencies of Lee. Applicants submit that Lee and Asada, analyzed singly or in combination do not teach or suggest “at least one light shielding layer on the pixel region, the light shielding layer crossing the data lines, the data electrode, and the common electrode at respective ones of the data line bent portions, the data electrode bent portions and the common electrode bent portions, wherein the at least one light shielding layer is formed on a different layer in a cross sectional view taken perpendicular to the surface of the substrate from the gate lines” as recited in claim 10. Accordingly, Applicants respectfully submit that claim 10, and claim 11 depending therefrom are allowable over Lee and Asada.

Claims 12-23 each recite an in-plane switching mode liquid crystal display device having a combination of features including “wherein each pixel region includes: ...a common line on bent portions of the data lines, the data electrodes and the common electrodes; and a plurality of auxiliary common lines on bent portions of the data electrodes and the common electrodes.” Applicants submit that Lee does not teach a pixel region having a common line and an auxiliary common line each “on bent portions of data electrodes and the common electrodes.”

The Examiner cites Asada as allegedly curing the deficiencies of Lee, However, Asada does not teach the above recited combination of features. For example, FIGs. 1-7 of Asada show a single common line and no auxiliary common lines in a pixel region. Applicants submit that that Lee and Asada analyzed singly or in combination do not teach at least “a plurality of

auxiliary common lines on the bent portions of the data electrodes and the common electrodes.” Accordingly, Applicants submit that claims 12-23 are allowable over Lee and Asada.

Claims 24-30 each recite an in-plane switching mode liquid crystal display device having a combination of features including “wherein each pixel region includes: ... common lines on the bent portions of the data lines, the data electrodes and the common electrodes.” In rejecting claim 24, the Examiner cites Lee as teaching this feature. Applicants respectfully submit that Lee does not teach at least pixel regions including “common lines on the bent portions of the data lines.” The Examiner cites Asada to cure the deficiencies of Lee. Applicants submit that no portion of Asada discloses or teaches a pixel region including “common lines on the bent portions of the data lines, the data electrodes and the common electrodes.” Applicants submit that Lee and Asada, analyzed singly or in combination, do not teach at least this combination of features. Accordingly, Applicants submit that claims 24-30 are allowable over Lee and Asada.


Applicants believe the application is in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. § 1.136, and any additional fees required under 37 C.F.R. § 1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. *A duplicate copy of this sheet is enclosed.*

Respectfully submitted,

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